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Adan Ayala TW199 Black & Decker Corporation 701 East Joppa Road Towson, MD 21286			ASHLEY, BOYER DOLINGER	
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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/524,076

Filing Date: March 13, 2000

Appellant(s): CHALKOWSKY, PETER

Adan Ayala, Reg. No. 38,373
Black & Decker Corporation
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/23/04 appealing from the Office
action mailed 5/14/04.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

This appeal involves claims 1-11.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

5,063,802

Shiotani

11-1991

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19,706,408

Vogele (Fed. Rep. Of Germany)

8-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiotani et al., U.S. Patent 5,063,802, in view of DE 197 06 408, hereinafter DE '408.

Shiotani et al. discloses the invention substantially as claimed, including, e.g., a base assembly (1); a fence (10) attached to the base assembly (see Figure 1) for supporting a workpiece, the fence has a fence plane (the vertical abutting surface of the fence as shown in Figure 1); a rotatable table (2) rotatably connected to the base assembly, the table having a table plane (the horizontal surface of the table as shown in Figure 1) for supporting a workpiece; a saw assembly (7,8,9 as shown in Figure 1) including a motor (5) and a blade (7) driven by the motor, the blade having a radius (see Figure 1, wherein a circular blade is clearly shown) and a blade center (although not given a specific reference numeral the center is clearly shown in Figure 1); and a pivot arm (4) pivotally attached to the table through support arm 3 and pivotally supporting the saw assembly about a first axis (see the axis shown in Figure 1 between arms 3 and 4) substantially parallel to the table plane (see Figure 1), thereby allowing the user to plunge the blade below the table plane (see Figure 1).

Shiotani et al. appears from the drawings to have the following limitations but is silent to the specifics dimension of the distance between the first axis and the table plane being about 0.472 time the radius; the distance between the first axis and the

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fence plane being about 1.45 times the radius; and the distance of the between the first axis and the blade center being about 1.882 times the radius.

DE '408 discloses that it is old and well known in the art that there is a need to cut various sized workpieces with a single miter saw as well as to modified existing miter saws in order to cut various sized workpieces.

In light of DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and further because such a modification would have involved a mere change in the size of a component and changes in size are generally recognized as being within the level of ordinary skill in the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the miter saw of Shiotani et al. with the specific dimensions stated above in order to allow for larger boards to be placed on and cut by the miter saw.

As to claim 1, the modified device of Shiotani et al. appears to disclose an area of the blade plunge below the table plane as being capable of being between about 14.4% and about 17.5 % of the total blade area and more specifically 15.75% based upon the blade size as well as how much is it is plunged. In the alternative, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the blade of the modified device of Shiotani et al. be capable of plunging between 14.4% and 17.5% of the total blade area below the table plane and more

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specifically about 15.75% in order to facilitate cutting larger sized boards, as also taught by DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or values involves only routine skill in the art.

As to claim 5, the modified device of Shiotani et al. discloses a miter saw that is capable of having the distance between the blade center and the table plane being about 0.57 times the radius of the when the blade is plunged depending upon how much the blade is plunged.

As to claim 6, the modified device of Shiotani et al. discloses a miter saw that is capable of having the a chord length of the blade periphery plunged below the table plane being at least 1.6 times the radius of the blade depending upon how much the blade is plunged.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 197 06 408, hereinafter DE '408.

DE '408 discloses the invention substantially as claimed, including, e.g., a base assembly (2); a fence (6,6',7,7') attached to the base assembly (see Figure 1) for supporting a workpiece, the fence has a fence plane (the vertical abutting surface of the fence as shown in Figure 1); a rotatable table (4/18) rotatably connected to the base assembly, the table having a table plane (the horizontal surface of the table as shown in Figure 1) for supporting a workpiece; a saw assembly (10,15 as shown in Figure 1) including a motor (14) and a blade (12) driven by the motor, the blade having a radius (see Figure 1, wherein a circular blade is clearly shown) and a blade center (13); and a

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pivot arm (generally indicated as 11 in Figure 1) pivotally attached to the table through support arm (not labeled) and pivotally supporting the saw assembly about a first axis (see the axis shown in Figure 1) substantially parallel to the table plane (see Figure 1), thereby allowing the user to plunge the blade below the table plane (see Figure 1).

DE '408 appears from the drawings to have the following limitations but is silent to the specifics dimension of the distance between the first axis and the table plane is about 0.472 time the radius; the distance between the first axis and the fence plane is about 1.45 times the radius; and the distance of the between the first axis and the blade center is about 1.882 times the radius.

DE '408 discloses that it is old and well known in the art that there is a need to cut various sized workpieces with a single miter saw as well as to modified existing miter saws in order to cut various sized workpieces.

In light of DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and further because such a modification would have involved a mere change in the size of a component and changes in size are generally recognized as being within the level of ordinary skill in the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the miter saw of DE '408 with the specific dimensions stated above in order to allow for larger boards to be placed on and cut by the miter saw.

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As to claim 1, the modified device of DE '408 appears to disclose an area of the blade plunge below the table plane as being capable of being between about 14.4% and about 17.5 % of the total blade area and more specifically 15.75% based upon the blade size as well as how much it is plunged. In the alternative, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the blade of the modified device of DE '408 be capable of plunging between 14.4% and 17.5% of the total blade area below the table plane and more specifically about 15.75% in order to facilitate cutting larger sized boards, as also taught by DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or values involves only routine skill in the art.

As to claim 3, the modified device of DE '408 discloses a miter saw with a slidable fence (6 or 6').

As to claim 5, the modified device of DE '408 discloses a miter saw that is capable of having the distance between the blade center and the table plane being about 0.57 times the radius of the when the blade is plunged depending upon how much the blade is plunged.

As to claim 6, the modified device of DE '408 discloses a miter saw that is capable of having the a chord length of the blade periphery plunged below the table plane being at least 1.6 times the radius of the blade depending upon how much the blade is plunged.

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As to claims 7-11, the modified device of DE '408 appears from the drawings to have the following limitations in at least one embodiment, see Figure 4, including a chord of the blade periphery plunged below the table plane with endpoints behind and in front of the fence and as to the specific distance it should be noted that the modified device of DE '408 is clearly capable of the distance merely by selecting the appropriate sized blade as well as the amount of the blade that it is plunged.

In the alternative, even if it is argued that the modified device of DE '408 lacks the specific distance of a) at least 1.1 times the radius of the blade; b) at least between about 1.236 to about 1.252 times the radius; c) at least 1.244 times the radius; d) between about 0.60 to 0.775 times the chord length of the blade; and/or about 0.757 times the chord length, it should be noted that the modified device of DE '408 discloses that it is old and well known in the art that there is a need to cut various sized workpieces with a single miter saw as well as to modified existing miter saws in order to cut various sized workpieces and in light of the embodiment shown in Figure 4 of DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and further because such a modification would have involved a mere change in the size of a component and changes in size are generally recognized as being within the level of ordinary skill in the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the miter saw of the modified device of DE '408 with the

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specific distance between the fence and the endpoint in front of the fence as one of the specific distances mentioned above in order to support a workpiece relative to the blade such that larger boards can be cut by smaller blades.

(10) Response to Argument

A. In response to Appellants Arguments in section heading A.

(Claims 1-11 are Patentable under 35 USC 103 (a) Over DE '408).

It should be noted that the previous art rejection suggested, in the alternative, that the DE '408 possessed the specific claimed dimensions since DE '408 was silent to those specific dimensions but appeared to be within those dimension simply because the device of DE '408 is capable of performing the same functions as shown in Figures 3-5. However, the crux of the rejection was based upon the fact that DE '408 discloses the overall claimed device with the ability to perform the same or similar function but lack a specific teaching for the specific dimensions, wherein DE '408 taught the desired effect of the claimed invention by modifying the dimensions of an existing miter saw in order to obtain a miter saw capable of the same desired result. In this case, allowing more of the blade to be plunged below the table plane. The modified dimensions must be similar or rather within the same general conditions in order to allow the device to perform the same or similar function. The rejection further relies upon case law to establish that it would have been obvious to modified the device of DE '408 to have the same specific dimensions as claimed because the device of DE '408 is within the same general conditions and that the specific ranges are not critical nor unexpected.

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Appellant contends that Figure 3 of DE '408 shows a distance between the first axis and the table plane of 0.57 times the radius of the blade and shows a distance between the first axis and the fence plane as 0.927 times the radius of the blade. However, it should be noted that it is unclear how Appellant determined these specific dimensions, as Figure 3 appears to lack sufficient data to make any mathematical calculations of any dimensions because the only known dimensions are the blade diameter and the workpiece sizes. Moreover, it is well established that patent drawings do not define the precise proportions of elements and may not be relied upon to show particular sizes if the specifications is silent on the particular dimensions. See, e.g., MPEP 2125. In this case, foreign document DE '408 does not state or suggest that the drawings are to scale. The disclosure only gives specific dimensions for the diameter of the blade and the workpieces but in no way suggests that they are to scale in the Figures. For the purposes of the is appeal it is assumed that the dimensions of DE '408 are not the same dimensions of claim 4 but they are in the same general conditions, i.e., they are very close to the same dimensions.

Appellant contends that claim 4 of the instant application calls for the specific distance between the first axis and the table plane of about 0.472 times the radius of blade and a distance between the first axis and the fence plane of about 1.45 times the radius of the blade. Appellant admittedly agrees that differences in ranges will not support patentability of the claimed subject matter unless there is evidence that such a range is critical. Appellant contends that the criticality of the specific dimensions is that of allowing a miter saw to cut larger sized workpieces with a smaller blade, which was

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not previously achievable by conventional 10-inch miter saws. Appellant further contends that the criticality can be shown by unexpected results. To support this alleged unexpected results Appellant submitted a declaration by the applicant Mr. Chaikosky.

The examiner does not hold the same view, that is, the examiner does not believe there is any criticality to the specific dimensions, as there are no unexpected results. In fact DE '408 suggests that the results are to be expected. It has been held that expected beneficial results are evidence of obviousness just as unexpected results are evidence of unobviousness. In this case, DE '408 establishes the obviousness of cutting different sized boards with a modified miter saw. The miter saw of DE '408 is modified to allow a 10 inch blade to cut various sized boards by allowing the blade to be plunged below the table plane more than conventional miter saws as well as locating the fence appropriately such that the desired sized workpiece fits against the fence and work support. It logically follows that the modifications to conventional miter saws which allow for more of the saw blade to be plunged below the table plane would in fact allow for cutting difference sized boards. Therefore, there are no unexpected results. One of ordinary skill in the art would expect the results obtained by the specific dimensions in view of DE '408.

As to Appellant's comments regarding the Declaration by Mr. Chaikowsky, it should be noted that the Declaration was fully responded to by the examiner. Appellant contends that the examiner should have responded to the Declaration in the after final amendment. However, it should be noted that the entry and responses to declarations filed after final are not a matter of right. Moreover, the declaration was further

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responded in the last office action and it should be noted that the Declaration no longer fully applies to the current claims, e.g. section 7 which suggests claim 4 includes the language "a nonremovable fence" but does not.

Appellant contends that it is unclear why the examiner stated that declaration implied the inventor has never seen the claimed invention of claim 4. The examiner, maybe presumably, understood from the repeated use of the inventors experience and knowledge of the art in the Declaration, in part attempted to suggest that the inventor has never, before the invention thereof, seen in the market place a similar device as claim 4. However, if the inventor has, the examiner requests information as to what the inventor may or may not have seen prior to the instant invention pursuant to 37 CFR 156.

Appellant further contends that Mr. Chaikowsky is a person with first-hand knowledge as to the circumstances surrounding the origin of the subject matter sought to be patented and the examiner error in suggesting that the opinions of the inventor and not a third party are insufficient statements of evidence with regard to secondary considerations such as criticality. Although, the Appellant is correct, in that, it is not improper for an inventor to file his own declaration suggesting criticality and one certainly could not question his first hand knowledge to the circumstances surrounding the origin of the subject matter sought to be patented, it is not necessarily sufficient to overcome the art rejections. The examiners comments in the previous office action addressing the declaration were not intended to suggest that the Appellant (Mr. Chaikowsky) did not have first hand knowledge as to the circumstances surrounding the

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origin of the instant application nor was the examiner suggesting that the declaration was lacking the proper formalities. The examiner was merely trying to convey that declarations provided by the inventor of must be given less weight as they may not be as objective as a third party. Any evaluation of any declaration presented by the inventors of the subject matter sought to be patented fall under the legal standard of "a preponderance of evidence" which requires the evidence to be more convincing than the evidence, which is offered in opposition to it. In this case, the declaration is solely based upon Mr. Chaikowsky's opinion and interpretation of the prior art. It offers no real evidence or proof that there are unexpected results by the specific dimensions; but rather suggests the inability of DE '408 to cut the same sized workpieces of the claimed invention with a fixed fence. The Declaration failed to address the implied teachings of DE '408. These implied teachings suggest that the obtained results by the specific dimensions are in fact expected because DE '408 suggests and provides motivation for rearrangement the elements of the 10 inch miter saw to plunge further below the table plane with and without fixed fences to cut different sized workpieces.

Appellant contends that the examiner did not consider the declaration because he stated that "the declaration of Chaikowsky is moot because there are no unexpected results"; however, this is not the case, the declaration was fully considered. It should be noted that the examiner merely meant that DE '408 suggests the desirability of rearranging the parts of conventional 10-inch diameter miter saws to enable these 10-inch diameter miter saw to cut larger workpieces. Therefore, the arrangement of the instant application to cut larger workpieces was in fact not unexpected but expected. In

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such a case, the use of declaration to show unexpected result would not be convincing because the prior art disclosed the expected results. Moreover, nothing in the declaration suggests any unexpected results. The declaration merely attempts to draw distinctions between the instant claimed invention and the device of DE '408; mainly focusing on the alleged dimensions of the DE '408. Nowhere in the declaration does Mr. Chaikowsky provide any proof to the alleged dimensions. What specifically in the declaration discusses unexpected results and more importantly why are there unexpected results when DE '408 discloses the same function and intent, where the generally conditions of the claims are met.

Appellant further attempts to draw a distinction between DE '408 and instant application by implying that the device of DE '408 requires a movable fence while the instant application does not. However, it should be noted that nowhere in the claims does the appellant use any language that suggests that the fence is fixed for all sized workpieces and cuts. Moreover, it should be noted that the fence of DE '408 is fixed in the first two embodiments shown in Figures 3 and 4, which allows for cutting different sized workpieces. Furthermore, the embodiment shown in Figure 5 is capable of having a fixed fence during cutting of any of the disclosed sized workpieces whether the workpiece is directly touching the fence or not. Appellant contends that DE '408 requires moving the fence between two positions for enabling cutting of a board 4 inches wide and a board 6 inches wide. Although, this is true, DE '408 does not require moving the fence between two positions when cutting 4 wide board and 5.5 inch wide board (Figures 3 and 4). As stated above nothing the claims suggests or limits the

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invention to any specific board-cutting configuration. Furthermore, as stated above there are no unexpected results, the results are in fact expected. One ordinary skill in the art after review DE '408 would expect a device capable of cutting both 4 inch wide board as well as 6 inch wide boards without moving the fence.

Appellant contends that the specific ranges allow for maintaining a fixed fence while allowing for multiple sized boards to be cut and therefore, the ranges are critical. Although, the specific ranges maybe consider critical, in that, the Appellant merely rearranged the dimension of DE '408 to determine the desire range, which allowed for a fixed fence and cutting of 6 inch board, this does not suggest or prove unexpected results. Clearly Figure 5 of DE '408 shows an embodiment with a fixed fence capable of cutting all three shown sizes of workpieces. One of ordinary skill in the art would readily recognize the above results as "expected" in light of DE '408, that is, plunging more of the blade below the table plane enables larger workpieces to be cut. Furthermore, DE '408 discloses a fixed fence in Figures 3 and 4. To suggest that DE '408 does not teach or suggest anything other than what is explicitly shown and/or stated would require one of ordinary skill in the art to ignore the overall implied teachings of the references and common sense.

Appellant's comments regarding the "intent" of the invention raises interesting questions, e.g., Figure 4 of the instant application shows a chord length CA which corresponds to the largest board that may be cut by the instant invention using a 10 inch blade, also part of the instant invention. This chord length as described in the instant application on page 5 corresponds to a 6-inch board. The corresponding

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embodiment for cutting nominal 6-inch boards in DE '408 is Figure 4. Therefore DE '408 discloses cutting both nominal 4 inch boards as well as the nominal 6 inch boards without moving the fence. If anything DE '408 discloses the same invention as claimed but goes even a step further and includes an additional embodiment not even contemplated by the Appellant for cutting even larger boards than the Appellant intended. To agree with Appellant's reasoning, one of ordinary skill in the art would have to believe that having the fixed fence, in Figure 4 of DE '408, positioned slightly to the left of the fence shown in Figure 4 of DE '408 but not to the extent of the fence shown in Figure 5, would be patentable and unobvious. Such repositioning would allow a board of another $\frac{1}{2}$ inch, 6 inches in total, to be cut is patentable and unobvious.

It should be noted that the phrase "fixed fence" does not mean that the fence cannot be moved under any circumstances, in fact all miter saw fences are movable. Moreover, the fence in DE '408, the instant application, and any miter saw could be moveable yet fixed during cutting operations.

Appellant further contends that the examiner relies on a mistaken interpretation of the DE '408 to reject claim 4; specifically, that DE '408 does not disclose two embodiments, one with a fixed fence as shown in Figures 3 and 4 which is capable of cutting one 4x4 and one 6x2.5 board with the fence in the same position. Appellant attempts to prove the above statement pointing out the actual dimensions as disclosed, which are not specifically 4x4 and 6x2.5. Appellant then suggests, regardless of the board sizes DE '408 lacks the ability to cut 6 by 4 workpieces as obtained by claim 4. However, it is believed by the examiner that these are the nominal

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dimensions of the boards as sold in hardware stores. In any event, the specific sizes are irrelevant as there are no limitations in the claims for any specific dimensioned workpieces. DE '408 clearly discloses and suggests the specific claim language of claim 4, as there are no unexpected results with the specific ranges. One of ordinary skill in the art is more than capable of rearranging and adjusting the dimensions of DE '408 to cut at least two different sized boards without moving the fence and DE '408 clearly provides motivation for adjusting or rearranging the dimensions to cut even more differently sized boards without moving the fence. Therefore, the results obtained by the specific dimensions are expected results not unexpected.

B. In response to Appellants Arguments in section heading B. (Claims 1-2 and 4-6 are Patentable under 35 USC 103 (a) Over Shiotani in view of DE '408).

Appellant again argues that the examiner erred by not considering the evidence of criticality and nonobviousness. However, as stated above the examiner never disregarded any evidence whether submitted in Appellant's arguments or Declaration. Appellant's previously submitted arguments and Declaration were found to be unconvincing in view of the teachings of the prior art, that is, Appellant failed to provide any persuasive evidence of unexpected results. Appellant's arguments and Declaration merely attempted to suggest what the current inventor believes to be the differences between the claimed invention of claim 4 and the prior art. Appellant's arguments and Declaration never addressed exactly how claim 4 provided unexpected results in light of the teachings of DE '408. DE '408, in the examiner's opinion, provides one of ordinary skill in the art the suggestion and the expected results of using a modified

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miter saw which allows for the blade to be plunged below the table plane thereby allowing for cutting of larger boards with or without a fixed fence. DE '408 also suggests that a fixed fence is possible when cutting two specific types of workpieces while also suggesting an additionally embodiment that allows for cutting even larger boards by moving the fence.

Appellant contends that Shiotani lacks the specific distances as claimed in claim 4; that it would not have been obvious to apply the teachings of DE '408 to Shiotani; and that DE '408 lacks the specific distances as well. However, it should be noted that Shiotani is being used to disclose a conventional miter saw that appeared to be capable of the same intended use and dimensions of claim 4 but lacked any specific discussion of the dimensions. The rejection further relied upon DE '408 to teach and suggest the desire to modify conventional miter saws to cut larger workpieces by allowing the blade to be plunged further below the table plane. The rejection continued by suggesting that DE '408 met the general conditions of the claim and any slight change in those general conditions would have been obvious in light of previous case law and for the motivation of allowing for larger boards to be cut by the miter saw. It is well established that such reliance on case law where the general conditions are met by the prior art are a proper forms of rejections as long as there are no unexpected results by the specific conditions, in this case the specific distances. As explained above, there are no unexpected results in this case. DE '408 clearly discloses the results of additional modifications to the miter saw would be expected to allow for cutting larger boards , wherein there are fixed an unfixed fences. DE '408 further discloses two possibilities

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depending exactly on the specific size of the boards needed to be cut. Both with fixed fences during the cutting operation and only moveable during cutting of the maximum size board and the minimum sized board. Furthermore, it should be noted DE '408 clearly suggests to one of ordinary skill in the art that the fence could be position somewhere other than that specifically disclosed in Figures 3-5, e.g., half way between the fence positions as shown in Figures 3-5. Such a fence position could be fixed and capable of cutting larger boards of Figures 3 and 4 but smaller than Figure 5. DE '408 teaches and suggests such a modification because Figures 3-5 of DE '408 disclose only two of the possibilities while providing the motivation for additional changes for other types of workpieces. In any event the examiner, as explained above, believes that DE '408 fully meets the claim language of claim 4 regardless of a fix fence or not because there are no specific references to any fixed fences or specific sized workpieces in the claims. Claim 4 only requires specific dimensions for the location saw and fence relative to the first axis, which allegedly provides for a fixed fence and cutting of specific workpieces. Regardless the specific dimensions are not unexpected as explained above. Moreover, just because DE '408 discloses moving the fence in one situation that does not reduce the suggestions or teachings of Figures 3 and 4, which have a fixed fence and the ability to cut various sized boards traditionally unavailable to the same sized miter saws.

In summary

No matter how you view DE '408 the argument that there are unexpected results because Appellant's device allows for cutting both 4-inch wide boards and 6-inch wide

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boards without moving the fence is just not factual. DE '408 discloses cutting both 4-inch wide boards and 5.5-inch wide boards without moving the fence, as shown in Figures 3 and 4. To believe Appellant, one of ordinary skill in the art would have to believe that permanently moving the fixed fence, in Figure 4 of DE '408, to the left slightly but not to the extent of Figure 5 wherein a actual 6-inch wide board could also be cut is patentable and unobvious. The examiner simply cannot agree. The intent of DE '408 is to cut nominal 4, 6, and 8-inch wide boards, nevertheless, DE '408 discloses cutting boards of about, see pages 7 and 8, 3.937 inches wide (Figure 3), 5.512-inches wide (Figure 4), and 8.27 to 8.66 inches wide (Figure 5). DE '408 clearly suggests the ability to cut various sized workpieces with and without fixed fences. It would not be unobvious to one of ordinary skill to move the fence slightly to the left of the fence in Figure 4, whether the fence was fixed there or not, to allow for cutting both 4-inch wide boards and 6-inch wide boards. Moreover, such a modification does not provide unexpected results. One of ordinary skill in the art would expect that if the fence was moved slightly to the left the miter saw would be able to cut a larger board whether the fence was fixed or not.

It should be noted that the phrase "fixed fence" does not mean that the fence cannot be moved under any circumstances, in fact all miter saw fences are movable. Moreover, the fence in DE '408, the instant application, and any miter saw could be moveable yet fixed during cutting operations.

The examiner maintains that the overall device as claimed and the intended function of the claimed device are obvious in view of the teachings of the DE '408. DE

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'408 clearly suggests to one of ordinary skill in the art cutting of multiple sized workpieces by allowing more of the saw to penetrate the work support plane as shown in the various Figures 3-5. Admittedly, DE '408 discloses the need to move the fence in one specific embodiment while the fence is fixed in the other two workpiece embodiments; however, the generally dimensions and the purpose are well disclosed and in this case, there are no unexpected results. One of ordinary skill in the art would expect the results of modifying the dimensions of any miter saw to cut multiple workpieces with a single sized blade of smaller size, particular 10 inches, in light of DE '408, where the dimensions facilitate the movement of the blade such that more of the blade is able to be plunged below the table plane.

Appellants attempts to suggest allowability based upon unclaimed language and intention is confusing, there are no requirements in the claims for a fixed fence or the ability to cut any specific sized workpiece or workpieces. The device of DE '408 is fully capable of cutting multiple workpieces with or without the fence being fixed as shown in Figures 3-4.

Appellants failed to fully appreciate the teachings of DE '408. Although DE '408 discloses moving the fence to cut larger boards, DE '408 still discloses cutting multiple sized boards without moving the fence, wherein Figure 4 of the DE '408 corresponds to the largest board cuttable by the instant claims with the specified ranges. In any event DE '408 suggests the expectability of the rearrangement of the structural elements of a conventional miter saws in order to allow greater blade plunge below the table plane

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such that larger boards are cut as well as the need to locate the fence appropriately for the specific workpiece.

If the board finds the examiner's answer confusing or unintelligibly written please remand the application so that the examiner can better clarify his position.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

BDA 

12/7/04

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